CLAIMS

1. A method for the diagnosis of a single nucleotide polymorphism in a Factor X gene in a human, which method comprises determining the sequence of the nucleic acid of the human at position 41 in exon 5 of the Factor X gene as defined by the position in EMBL ACCESSION NO. L00394, and/or at position 57 in exon 7 of the Factor X gene as defined by the position in EMBL ACCESSION NO. L00396, and determining the status of the human by reference to polymorphism in the Factor X gene.

2. A method for diagnosis according to claim 1 in which the single nucleotide polymorphism is further defined as:
the single nucleotide polymorphism at exon 5 position 41 is presence of C and/or T;
the single nucleotide polymorphism at exon 7 position 57 is presence of C and/or T.

3. A method for diagnosis according to claim 1 or 2 in which the sequence is determined by a method selected from amplification refractory mutation system and restriction fragment length polymorphism.

4. Use of a method according to any of claims 1 - 3 for predicting the clinical response to a therapeutic compound, or for determining the therapeutic dose of a compound, in the treatment of Factor X- and/or Factor Xa- mediated disease.

5. Use of a method according to any of claims 1 - 3 for assessing the predisposition of an individual to diseases mediated by Factor X and/or Factor Xa.

6. A nucleic acid comprising any one of the following polymorphisms: the nucleic acid of EMBL ACCESSION NO. L00394 with T at position 41 as defined by the position in EMBL ACCESSION NO. L00394; and/or the nucleic acid of EMBL ACCESSION NO. L00396 with T at position 57 as defined by the position in EMBL ACCESSION NO. L00396; or a complementary strand thereof or an antisense sequence thereto or a fragment thereof of at least 20 bases comprising at least one polymorphism.

7. An allele-specific primer capable of detecting a Factor X gene polymorphism at position 41 in exon 5 of the Factor X gene as defined by the position in EMBL ACCESSION NO. L00394 and/or at position 57 in exon 7 in the Factor X gene as defined by the position in EMBL ACCESSION NO. L00396.

8. An allele-specific oligonucleotide probe capable of detecting a Factor X gene polymorphism at position 41 in exon 5 of the Factor X gene as defined by the position in EMBL ACCESSION NO. L00394 and/or at position 57 in exon 7 in the Factor X gene as defined by the position in EMBL ACCESSION NO. L00396.

9. A diagnostic kit comprising an allele-specific primer as defined in claim 7 or an allele-specific oligonucleotide probe as defined in claim 8.

10. A method of treating a human in need of treatment with a Factor Xa ligand antagonist drug in which the method comprises:

(i) diagnosis of a single nucleotide polymorphism in the Factor X gene in the human, which diagnosis comprises determining the sequence of the nucleic acid at position 41 in exon 5 of the Factor X gene as defined by the positions in EMBL ACCESSION NO. L00394, and/or at position 57 in exon 7 in the Factor X gene as defined by the positions in EMBL ACCESSION NO. L00396, and determining the status of the human by reference to polymorphism in the Factor X gene;

and

(ii) administering an effective amount of a Factor Xa ligand antagonist drug.

11. Use of a Factor Xa ligand antagonist drug in the preparation of a medicament for treating a Factor Xa and/or Factor X mediated disease in a human diagnosed as having a single nucleotide polymorphism at position 41 in exon 5 of the Factor X gene as defined by the positions in EMBL ACCESSION NO. L00394, and/or at position 57 in exon 7 in the Factor X gene as defined by the positions in EMBL ACCESSION NO. L00396.

12. A computer readable medium comprising at least one nucleic acid sequence as defined in claim 6 stored on the medium.